

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1 - 28. (Cancelled)

29. (Currently Amended) A guide wire comprising:

an elongate wire including a core having an outer surface having an area per unit length, a tubular first layer disposed about the core having an inner surface having an area per unit length of no more than the area per unit length of the outer surface of the core, wherein a portion of the layer has a topology selected from the topology of a single-lumen tube or the topology of a single-lumen tube having a slit[,,];

wherein the elongate wire has a first property over a first portion and a second property over a second portion, wherein the first property is different from the second property, and wherein the elongate wire is formed into a coil; and

wherein the elongate wire forming the coil comprises a continuous wire.

30. (Currently Amended) The guide wire of claim 29, wherein said first and second properties are selected from the group consisting of radiopacity, lubricity, hydrophilicity, ~~hemocompatibility~~ hemocompatibility, flexibility, malleability, stiffness, and shape memory.

31. (Previously Presented) The guide wire of claim 29, wherein at least some of said first property is provided by the layer.

32. (Previously Presented) The guide wire of claim 29, wherein the layer is a sleeve.

33. (Previously Presented) The guide wire of claim 32, wherein the sleeve is polymeric.

34. (Previously Presented) The guide wire of claim 29, wherein the layer is a material coating.

35. (Previously Presented) The guide wire of claim 34, wherein the coating comprises a different material than the core.

36. (Previously Presented) The guide wire of claim 29, wherein the elongate wire further comprises a second layer disposed on a portion of the core free from the first layer.

37. (Previously Presented) The guide wire of claim 36, wherein the first layer and the second layer alternate.

38. (Currently Amended) The guide wire of claim 29, wherein the first layer is disposed on noncontiguous portions of the core.

39. (Previously Presented) A guide wire as in claim 29, wherein the first and second properties differ in radiopacity from each other.

40. (Previously Presented) A guide wire as in claim 29, wherein the coil is helically disposed about a guide wire distal portion.

41. (Previously Presented) A guide wire as in claim 29, wherein the pitch of the coil at a first section is different than the pitch of the coil at a second section.

42. (Currently Amended) A guidewire having a distal end portion provided with radiation impermeability and flexibility, the guidewire comprising:

a core wire having a distal end portion and a proximal end portion and a circular cross-section decreasing in diameter at the distal end portion toward a distal end of the core wire, and

a coil wire having a constant diameter provided coaxially with the core wire and provided on the distal end portion of the core wire, the coil wire comprising a continuous wire including a ~~first wire of different constituent materials~~ a plurality of alternating regions of radiopacity.

43-49 (Cancelled).

50. (New) A guide wire comprising:

an elongate wire including a core having an outer surface having an area per unit length, a polymeric tubular sleeve disposed about the core having an inner surface having an area per unit length of no more than the area per unit length of the outer surface of the core, wherein a portion of the sleeve has a topology selected from the topology of a single-lumen tube or the topology of a single-lumen tube having a slit; and

wherein the elongate wire has a first property over a first portion and a second property over a second portion, wherein the first property is different from the second property, and wherein the elongate wire is formed into a coil.

51. (New) A guide wire comprising:

an elongate wire including a core having an outer surface having an area per unit length, a tubular first layer disposed about the core having an inner surface having an area per unit length of no more than the area per unit length of the outer surface of the core, wherein a portion of the layer has a topology selected from the topology of a single-lumen tube or the topology of a single-lumen tube having a slit;

the elongate wire further including a second layer disposed on a portion of the core free from the first layer; and

wherein the elongate wire has a first property over a first portion and a second property over a second portion, wherein the first property is different from the second property, and wherein the elongate wire is formed into a coil.

52. (New) A guide wire comprising:

an elongate wire including a core having an outer surface having an area per unit length, a tubular first layer disposed about the core having an inner surface having an area per unit length of no more than the area per unit length of the outer surface of the core, wherein a portion of the layer has a topology selected from the topology of a single-lumen tube or the topology of a single-lumen tube having a slit;

the elongate wire further including a second layer disposed on a portion of the core free from the first layer, and wherein the first layer and second layer alternate; and

wherein the elongate wire has a first property over a first portion and a second property over a second portion, wherein the first property is different from the second property, and wherein the elongate wire is formed into a coil.